

AMENDMENTS TO CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (CURRENTLY AMENDED) An apparatus for establishing services that utilize policy-enabled resources in a communications network, comprising:

a first policy enforcement point (PEP) for identifying policy-enabled resources that are available and allocating requested policy-enabled resources to services;

a first network resource controller (NRC) for requesting from available policy-enabled resources any policy-enabled resources within a first domain required to establish a particular service; and

a first resource policy layer (RPL) for provisioning, to a service being established, the policy-enabled resources allocated to that service, said first resource policy layer including at least one first policy description protocol (PDP),

wherein said first NRC initiates association between said first PEP and said at least one first PDP, and said first PDP provides said first PEP with a policy upon establishment of said association between said first PEP and first PDP, and

wherein when said first NRC requires resources from a second domain outside the first domain, said first NRC signals a request to a second said NRC in said second domain, which initiates association between a second said PEP in said second domain and said first PDP, said first PDP providing said second PEP with a

policy upon establishment of said association between said second PEP and said first PDP,

whereby there is a decoupling of policy management from the management of policy-enabled resources.

2. (PREVIOUSLY PRESENTED) The apparatus as defined in claim 1 wherein the first PEP comprises a plurality of virtual PEPs, each virtual PEP being dynamically associated to a respective service.

3. (ORIGINAL) The apparatus as defined in claim 1 wherein the communications network comprises a plurality of domains, each of the first PEP, first NRC, and the first RPL may be associated with any one of the domains.

4. (CANCELED)

5. (CANCELED)

6. (ORIGINAL) The apparatus as defined in claim 1 wherein the communications network comprises a plurality of domains, the apparatus further comprises a second RPL associated with a different domain than the first PEP.

7. (CANCELED)

8. (ORIGINAL) The apparatus as defined in claim 1 wherein resource capability information descriptors are used for resource discovery and policy provisioning between entities.

9. (CURRENTLY AMENDED) A method of establishing services that utilize policy-enabled resources in a communications network, comprising:

identifying, at a first policy enforcement point (PEP) policy-enabled resources within a first domain that are available and allocating requested policy-enabled resources to services;

requesting, from available policy-enabled resources at a first network resource controller (NRC) any policy-enabled resources required to establish a particular service; and

provisioning, to a service being established at a first resource policy layer (RPL), the policy-enabled resources allocated to that service, said first resource policy layer including at least one policy description protocol (PDP),

wherein said first NRC initiates association between said first PEP and said at least one first PDP, and said first PDP provides said first PEP with a policy upon establishment of said association between said first PEP and first PDP, and

wherein when said first NRC requires resources from a second domain outside the first domain, said first NRC signals a request to a second said NRC in another domain, which initiates association between a second said PEP in said second domain and said first PDP, said first PDP providing said second PEP with a policy upon establishment of said association between said second PEP and said first PDP,

whereby there is a decoupling of policy management from the management of policy-enabled resources.

10. (ORIGINAL) The method as defined in claim 9 wherein the communications network comprises a plurality of domains, each of the first PEP, first NRC, and the first RPL may be associated with any one of the domains

11. (ORIGINAL) The method as defined in claim 9 wherein virtual PEPs of a main PEP are provisioned to provide resource services.

12. (CURRENTLY AMENDED) The method as defined in claim ~~10-11~~ wherein the virtual PEPs are provisioned to provide services in a different domain.

13. (CURRENTLY AMENDED) The method as defined in claim 12 wherein separate PEPs, each from a different domain, are provisioned to the same service by ~~a~~ said first PDP.

14. (CURRENTLY AMENDED) The method as defined in claim 13 wherein two separate PEPs, each from a different domain, are provisioned to the same service by ~~a~~ said first PDP.

15. (CANCELED)

16. (CANCELED)

17. (NEW) The apparatus as defined in claim 1, wherein the first and second PEPs are virtual PEPs created upon request for said particular service by one of the first and second NRCs.

18. (NEW) The method as defined in claim 9, wherein the first and second PEPs are virtual PEPs created upon request for said particular service by one of the first and second NRCs.

19. (NEW) An apparatus for establishing services that utilize policy-enabled resources in a communications network, comprising:

a first network resource controller (NRC), said first NRC requesting, from available policy-enabled resources, any policy-enabled resources required to establish a particular service;

a virtual first policy enforcement point (PEP) created upon requesting the particular service, said virtual PEP identifying policy-enabled resources that are available and allocating requested policy-enabled resources to services;

a resource policy layer (RPL) including at least one policy description protocol (PDP),

wherein the virtual PEP is provided with information to contact the PDP of the RPL in order to provision the policy-enabled resources allocated to the particular service.

20. (NEW) A method of establishing services that utilize policy-enabled resources in a communications network, comprising:

requesting, from available policy-enabled resources at a first network resource controller (NRC) any policy-enabled resources required to establish a particular service;

creating a virtual first policy enforcement point (PEP) upon requesting the particular service;

identifying, at the virtual PEP, policy-enabled resources that are available and allocating requested policy-enabled resources to services;

providing the virtual PEP with information to contact a policy description protocol (PDP) of a resource policy layer (RPL); and

provisioning, to a service being established at a first resource policy layer (RPL), the policy-enabled resources allocated to that service.